

Monday, 3/19/2007 4:40:12 PM
Kim Johnston

Process Sheet

CU-DAR001 Dart Helicopters Services	Drawing Name	: FWD TUBE ASSEMBLY	
31307	Part Number	: D3391021	
Estimate Number : 10467	Drawing Number	: D3391 REV. E PH	
P.O. Number : N/A	Project Number	: N/A	
This Issue : 3/19/2007 S.O. No. : JLA	Drawing Revision	: F PH 07.04.26	
Prsht Rev. : NC	Material	: N/A	
First Issue : N/A	Due Date	: 4/10/2007	
Previous Run : 31306	Type	: MACHINED PARTS	
Written By : <u>JA 07.03.20</u>	Qty:	1	Um: Each
Checked & Approved By : <u>JA 07.03.20</u>			
Comment : Est. A 05.09.13 New issue KJ/JLM			
Est. B 06.02.10 Dwg rev.D ecn 773 EC			
Est. C 06.05.02 Added inspections EC			
est D 07.03.13 rev F dwg EC			

Additional Product

Job Number:



Seq. #: Machine Or Operation: Description:

1.0 D6013047 SKIDTUBE MAT'L



Comment: Qty.: 1.0000 Each(s)/Unit Total: 1.0000 Each(s)
SKIDTUBE MAT'L

Pick:

Qty	Part Number	Description	Batch
1	D6013-047	Extrusion	B 26547

JD 7-3-22

2.0 LANDING GEAR 1 LANDING GEAR RESOURCE 1



Comment: LANDING GEAR RESOURCE 1
Cut extrusion to 46.52 +0.010 -0.020

JD 7-3-22

3.0 BENDING BENDING MACHINE



Comment: No bender
Bend as per Dwg D3391 Using Bend Prog 3391021

EL 7-3-28

4.0 QC5 INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

DP 7-3-29

5.0 HAAS1 HAAS CNC VERTICAL MACHINING #1



Comment: HAAS CNC VERTICAL MACHINING #1

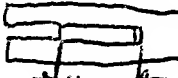

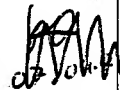


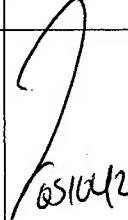
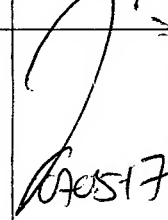
1-Machine as per Folio FA590 Rev. AA & Dwg D3391 Rev. E
Identify as D3391-1

2-Deburr

07/04/11
07/05/11

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: D3391-021 PAR #: NA Fault Category: Prod (machined Part) NCR: Yes No DQA: Q Date: 07/08/22
 QA: N/C Closed: JK Date: 07.08.23

NCR: 31307		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
07/04/11	5	the measured was too long of .100"  machinist error.		SKIMP PART - BYC HIGH STRESS AREA UNDER SHOULDER - 3.630 DIM IS TOO LARGE WILL NOT FIT TO INSIDE	 07/04/11			
		↓ 3.630" dimension is also over tolerance	Per 07.04.22 per QSI 042	Re-machine to down to get within 3.590 +0.025 top and bottom to 4.360" (SEE ATTACHED)	07.04.22 RTH per QSI 042 J.T			

NOTE: Date & initial all entries

Date: Monday, 3/19/2007 4:40:12 PM
User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: FWD TUBE ASSEMBLY

Job Number: 31307

Part Number: D3391021

Job Number:



Seq. #:

Machine Or Operation:

Description :

6.0

QC2

INSPECT PARTS AS THEY COME OFF MACHINE



Comment: INSPECT PARTS AS THEY COME OFF MACHINE

mk 07/05/17

1

7.0

QC8

SECOND CHECK



Comment: SECOND CHECK

SG 02.05.17

1

8.0

LANDING GEAR 1

LANDING GEAR RESOURCE 1



Comment: LANDING GEAR RESOURCE 1

1-Drill and c'sink float bag holes as per Dwg D3391 using DT8798(Do not open tow cap holes to finish size)
(ONLY DRILL HOLES MARKED "A")

2-Drill Remaining two holes for tow cap using DT 8819 Locating off of .1875" holes drilled in previous step

3-Open tow cap holes to .208" as per Dwg D3391

4-Open Tow Ring hole to .640" as per Dwg D3391

5-Drill wearplate holes as per Dwg D3391 Using Dt8217 & DT8878

6--Deburr

DP
7-5-23

9.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

7-05-25 @

10.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

Acid etch and Alodine as per QSI 005 4.1

Jb 7-5-31

11.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION

M-L

07/07/14

12.0

POWDER COATING

POWDER COATING



Comment: POWDER COATING

Powder Coat White Gloss (Ref: 4.3.5.1) as per QSI 005 4.3

BR/mk 07-07-18

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Monday, 3/19/2007 4:40:12 PM
User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: FWD TUBE ASSEMBLY

Job Number: 31307

Part Number: D3391021

Job Number:



Seq. #:

Machine Or Operation:

Description:

13.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION

FL 07/07/23 (1)

14.0

NAS1330C3KB166

INSERT



Comment: Qty.: 20.0000 Each(s)/Unit Total : 20.0000 Each(s)

Rivnut

Pick:

Qty

Part Number

Description

Batch

14

NAS1330C3KB166

Insert

1102849 21

15.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

Install Inserts as per Dwg

41 07-07-23 (1)

16.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

EP 27/07/23 (1)

17.0

D3401041

Tow Cap Assembly



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Tow Cap Assembly

Pick:

Qty

Part Number

Description

Batch

1

D3401-041

Tow Cap

1331346 21

18.0

D356413

WEARSHOE



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

WEARSHOE

1333800 21

19.0

D356613

GASKET



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

GASKET

1332744 41 07-08-16 (1)

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Monday, 3/19/2007 4:40:12 PM
User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: FWD TUBE ASSEMBLY

Job Number: 31307

Part Number: D3391021

Job Number:



Seq. #:

Machine Or Operation:

Description :

20.0

AN3C4A

BOLT



Comment: Qty.: 10.0000 Each(s)/Unit Total : 10.0000 Each(s)

Bolt

Pick:

Qty	Part Number	Description	Batch
4	AN3C4A	Bolt	M104955

M104955

es

21.0

NAS1515H3L

WASHER



Comment: Qty.: 4.0000 Each(s)/Unit Total : 4.0000 Each(s)

Washer

Pick:

Qty	Part Number	Description	Batch
4	NAS1515H3L	Washer	M104603

M104603

es

22.0

AN960C10L

washer



Comment: Qty.: 10.0000 Each(s)/Unit Total : 10.0000 Each(s)

washer

M105057

es

23.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: SMALL & MEDIUM FAB RESOURCE 1

Install tow Cap as per Dwg D3391

Identify as D3391-021

es

07-07-23

24.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

Inspect thread of each insert using DT8821

M10123

25.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location: _____

32237

26.0

QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

07-08-22
07-08-22

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART AEROSPACE LTD		Work Order:	31307
Description: Float Skidtube (412)		Part Number:	D3391-1
Inspection Dwg: D3391	Rev: E ^F _{07.04.26}		
		Page 1 of 1	

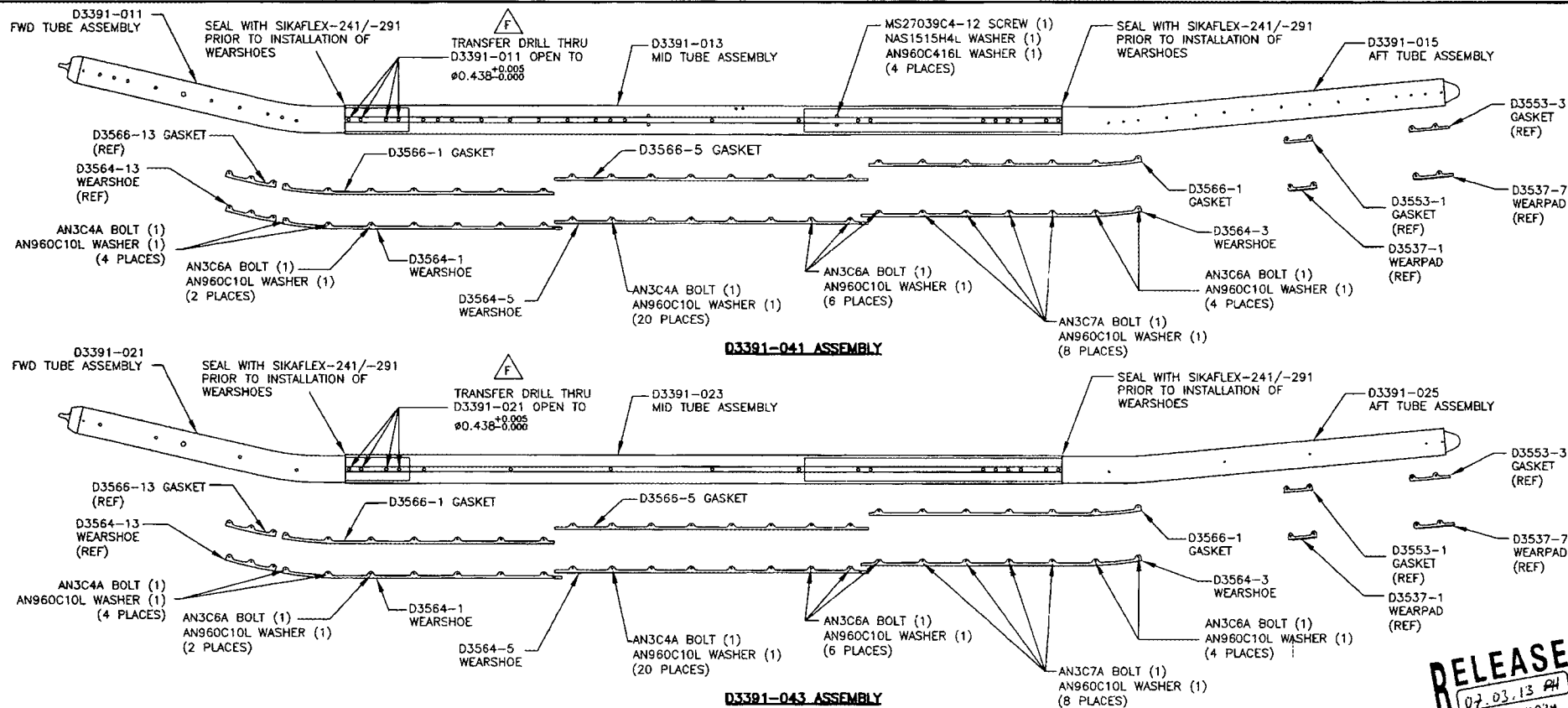
FIRST ARTICLE INSPECTION CHECKLIST

☒ First Article ☐ Prototype

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
0.687	+0.010/-0.000	0.691	✓			
3.590	+0.025/-0.010	3.632	✓	✓		
3.300	+0.040/-0.000	3.333	✓			
1.429	+0.040/-0.060	1.402	✓			
4.250	+/-0.010	4.252	✓			
4.250	+/-0.010	4.364		✓		
1.500	+/-0.010					
1.750	+/-0.010					
5.250	+/-0.010					
7.000	+/-0.010					
Ø0.484	+0.006/-0.001					
1.500	+/-0.010					
1.750	+/-0.010					
5.250	+/-0.010					
7.000	+/-0.010					
Ø0.484	+0.006/-0.001					

Measured by: <i>gmk</i>	Audited by: <i>SC</i>	Prototype Approval:	N/A
Date: 07/05/17	Date: 07.05.17	Date:	N/A

Rev	Date	Change	Revised by	Approved
A	06.04.27	New Issue P/O D3391-011/-021	KJ/JLM	
B	06.06.19	Tolerances revised per D3391 Rev. E	KJ/JLM	<i>[Signature]</i>



RELEASED
07.03.13 PH
PAR ECH 934

D3391-041/-043 FLOAT SKIDTUBE ASSEMBLY PARTS LIST

QTY	QTY	PART NUMBER	DESCRIPTION
-041	-043		
X	X	D3391-041	FLOAT SKIDTUBE ASSEMBLY
		D3391-043	FLOAT SKIDTUBE ASSEMBLY
1	1	D3391-011	FWD TUBE ASSEMBLY
1	1	D3391-013	MID TUBE ASSEMBLY
1	1	D3391-015	AFT TUBE ASSEMBLY
1	1	D3391-021	FWD TUBE ASSEMBLY
1	1	D3391-023	MID TUBE ASSEMBLY
1	1	D3391-025	AFT TUBE ASSEMBLY
1	1	D3564-1	WEARSHOE
1	1	D3564-3	WEARSHOE
1	1	D3564-5	WEARSHOE
2	2	D3566-1	GASKET
1	1	D3566-5	GASKET
24	24	AN3C4A	BOLT
12	12	AN3C6A	BOLT
8	8	AN3C7A	BOLT
44	44	AN960C10L	WASHER
4	4	MS27039C4-12	SCREW
4	4	NAS1515H4L	WASHER
4	4	AN960C416L	WASHER

GENERAL NOTES

- 1) ALL DIMENSIONS ARE IN INCHES
- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) FINISH: ACID ETCH AND ALODINE PER DART QSI 005 4.1
POWDER COAT WHITE (4.3.5.1) PER DART QSI 005 4.3
- 4) SPRAY INSIDE OF TUBE WITH A COAT OF LPS LABORATORIES "LPS-3" AFTER FINISH AND AFTER INSTALLATION OF INSERTS. COAT ALL EXPOSED FASTENERS WITH LPS LABORATORIES "LPS PROCYON" AFTER FINAL ASSEMBLY, CLEAN EXCESS OFF POWDER COATING WITH MEK DEGREASER.
- 5) USE DART DRILL TEMPLATE DT8217 TO LOCATE AND DRILL 'E' SIZE HOLES (0.250-0.257) FOR WEARSHOE INSERTS. C'SINK 0.391/0.425 x 100' AS APPLICABLE AND INSTALL INSERTS EXCEPT WHERE INDICATED.

COPYRIGHT © 2006 BY DART AEROSPACE USA, INC.

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.

F	07.01.18	ADD SS WEARSHOE, GASKET REMOVE FWD SADDLE HOLE -011/-021
E	06.04.25	CHANGE TOLERANCE, EASE MANUFACTURE
D	06.01.23	UPDATE TOLERANCE, CHANGE HOLE SIZE
C	05.09.27	LENGTHEN AFT EXTENSION
B	05.06.10	DRAWING UPDATES
A	05.02.07	NEW ISSUE
DESIGN	DRAWN BY	DART DART AEROSPACE USA, INC. PORT HADLOCK, MA
CHECKED	APPROVED	DRAWING NO. D3391
DATE	TITLE	SCALE
07.01.18	412 FLOAT SKIDTUBE	NTS

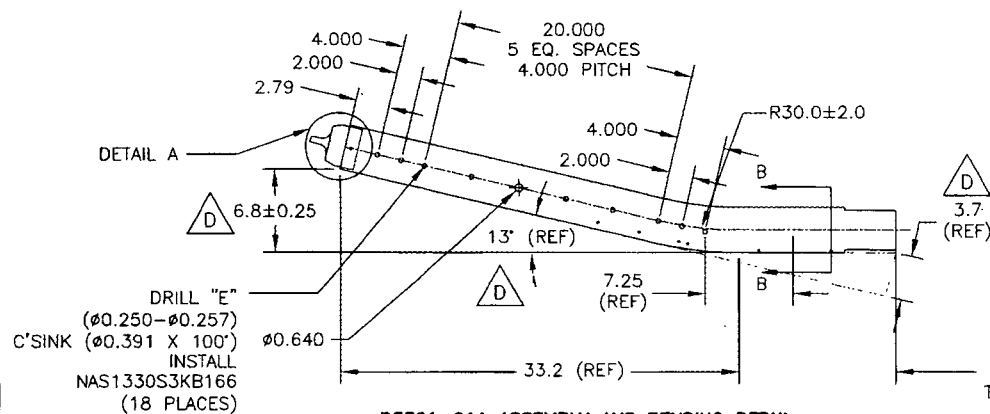
REV. F

SHEET 1 OF 5

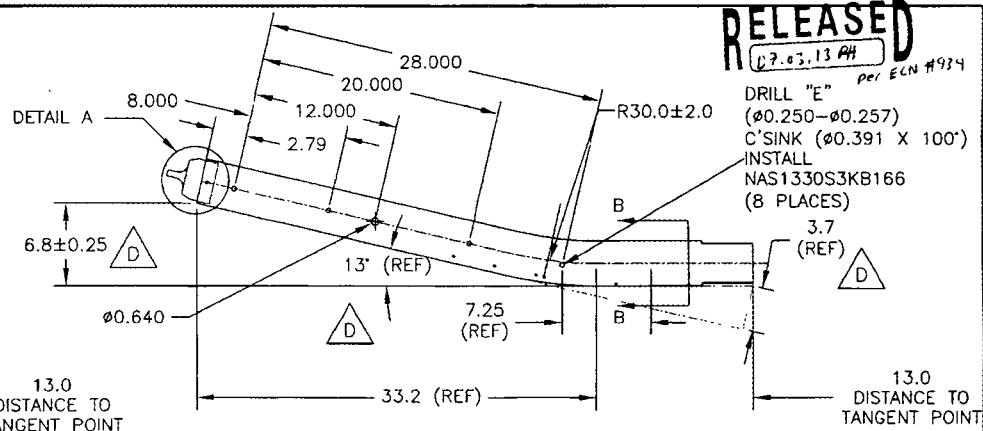
SCALE

NTS

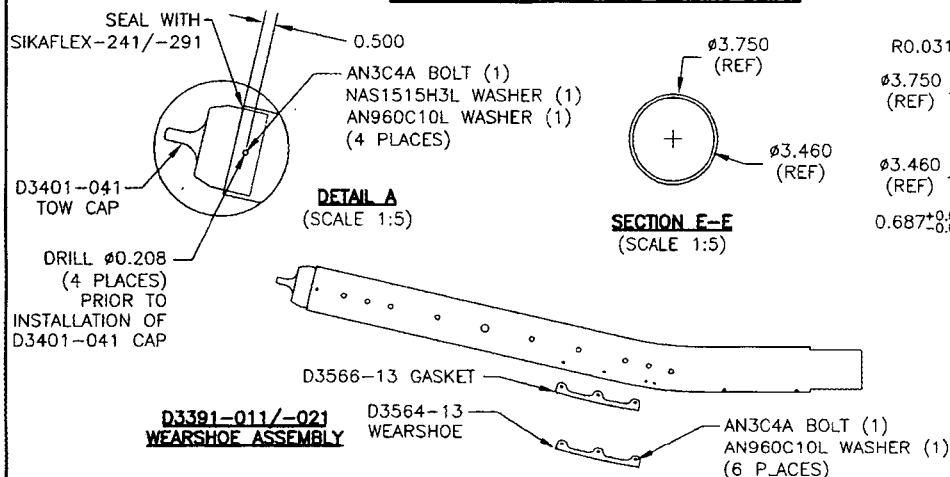
RELEASED
 67-03, 13 AH
 per ECN #934



D3391-011 ASSEMBLY AND BENDING DETAIL

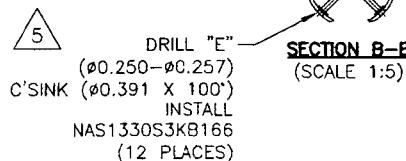


D3391-021 ASSEMBLY AND BENDING DETAIL

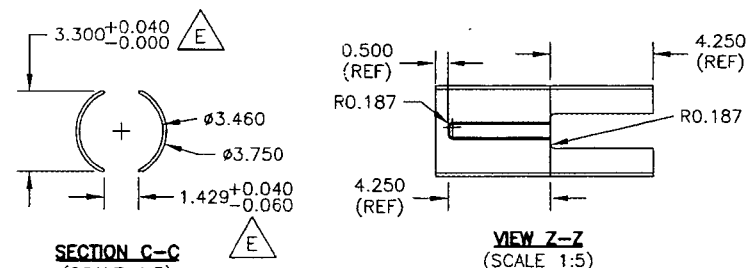


D3391-011/-021 FWD TUBE ASSEMBLY PARTS LIST

QTY - 011	QTY - 021	PART NUMBER	DESCRIPTION
X	X	D3391-011	FWD TUBE ASSEMBLY
		D3391-021	FWD TUBE ASSEMBLY
1	1	D6013-047	FWD TUBE
1	1	D3401-041	TOW CAP
1	1	D3564-13	WEARSHOE
1	1	D3566-13	GASKET
10	10	AN3C4A	BOLT
4	4	NAS1515H3L	WASHER
10	10	AN960C10L	WASHER
30	20	NAS1330S3KB166	INSERT (OR NAS1330C3KB166)

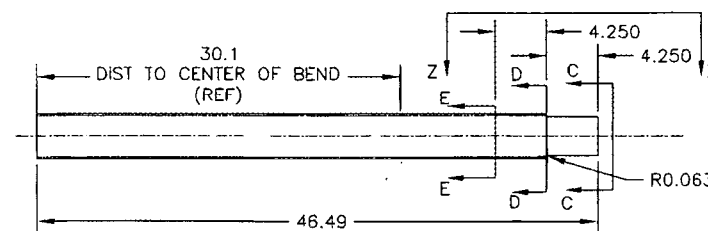


SECTION B-B
 (SCALE 1:5)



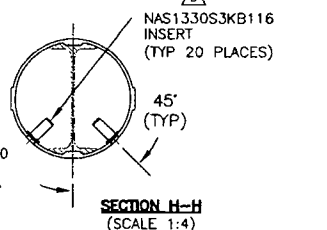
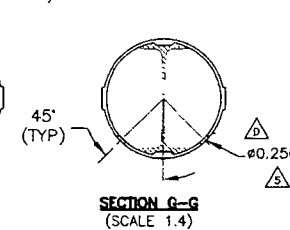
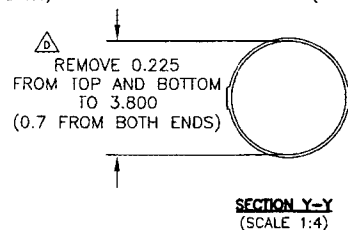
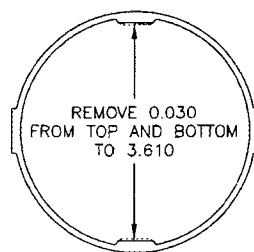
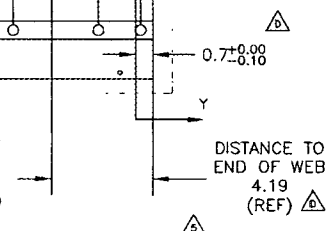
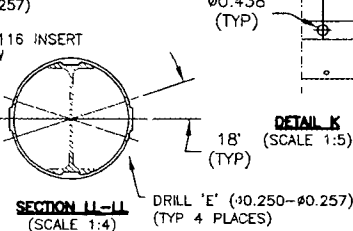
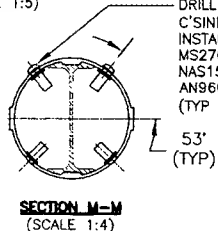
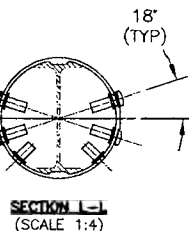
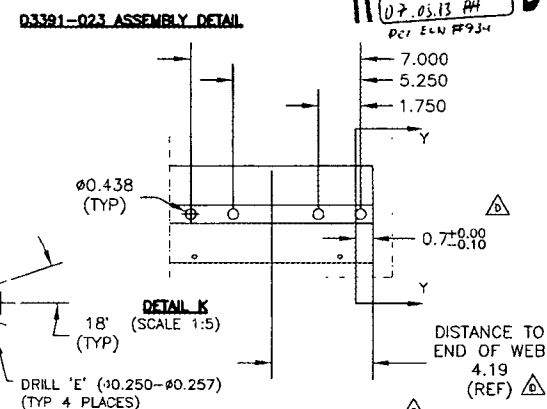
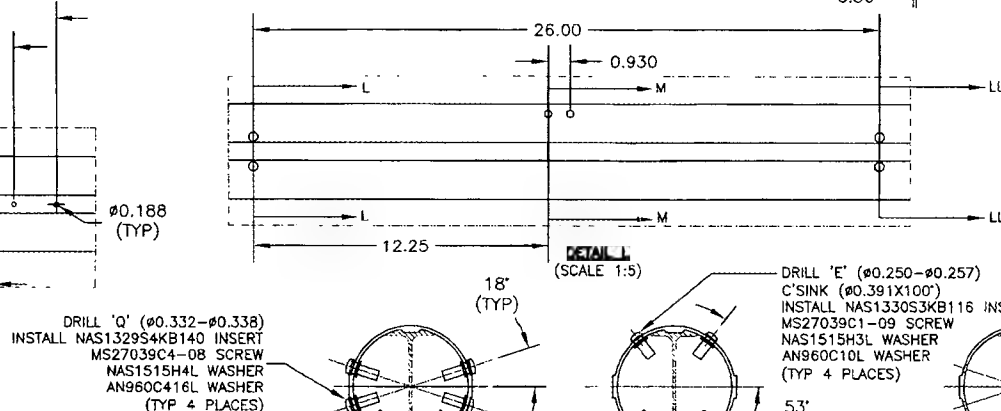
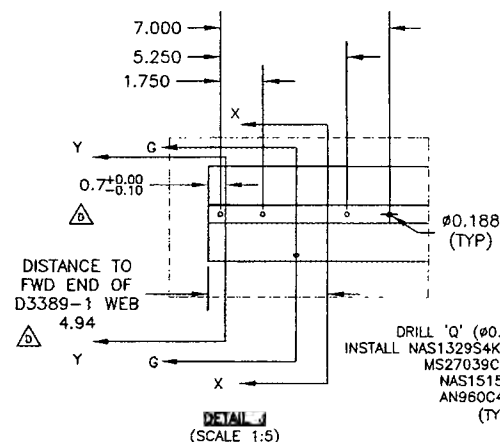
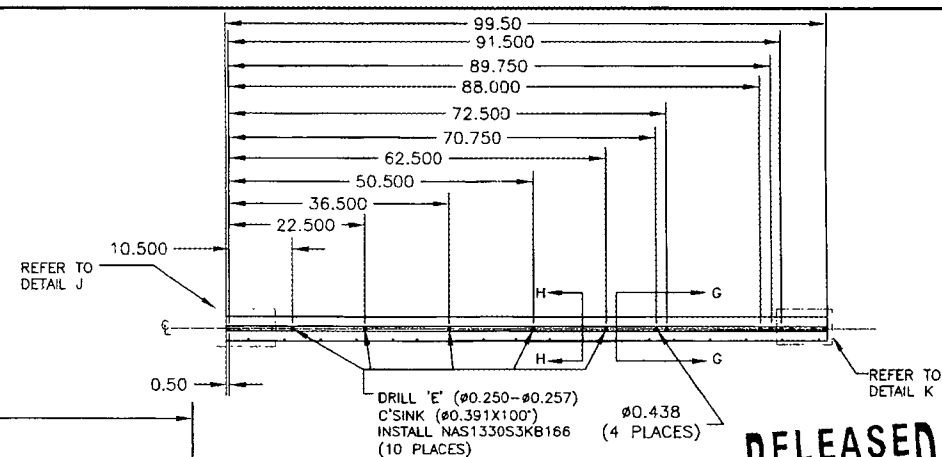
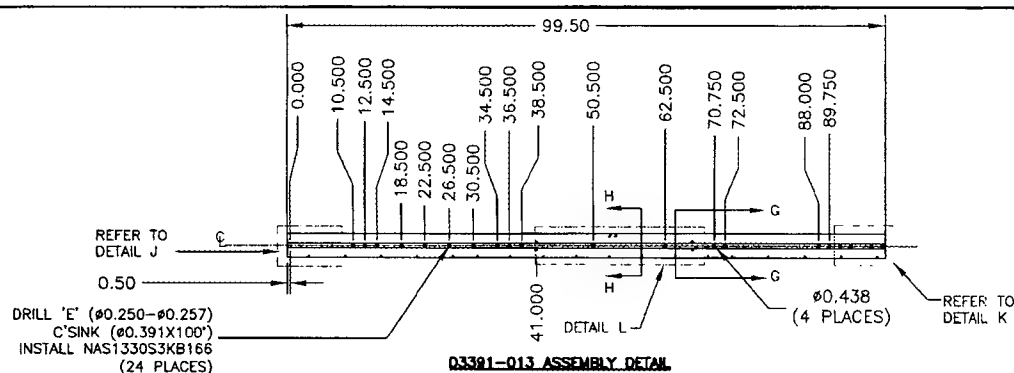
SECTION C-C
 (SCALE 1:5)

VIEW Z-Z
 (SCALE 1:5)



D3391-1 DRILLING AND CUTTING DETAIL
 (MAKE FROM D6013-047 SKIDTUBE MATERIAL)

COPYRIGHT © 2008 BY DART AEROSPACE USA, INC.		DESIGN PH	DRAWN BY PH	DART DART AEROSPACE USA, INC. PORT HADLOCK, WA	
CHECKED [Signature]	APPROVED [Signature]	DRAWING NO. D3391		REV. F SHEET 2 OF 5	
DATE 07.01.18		TITLE 412 FLOAT SKIDTUBE		SCALE 1:10	



D3391-013/-023 MID TUBE ASSEMBLY PARTS LIST

QTY - 013	QTY - 023	PART NUMBER	DESCRIPTION
X	X	D3391-013	MID TUBE ASSEMBLY
		D3391-023	MID TUBE ASSEMBLY
1	1	D2500-1-100	EXTRUSION
1	1	D3389-1	WEB
24	20	NAS1330S3KB116	INSERT (OR NAS1330C3KB116)
24	10	NAS1330S3KB166	INSERT (OR NAS1330C3KB166)
4		NAS1329S4KB140	INSERT (OR NAS1329C3KB140)
4		NAS1515H3L	WASHER
4		AN960C10L	WASHER
4		NAS1515H4L	WASHER
4		AN960C416L	WASHER
4		MS27039C1-09	SCREW
4		MS27039C4-08	SCREW

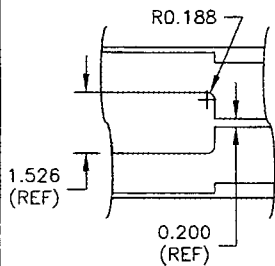
D3391-013/-023 MID TUBE ASSEMBLY

- MATERIAL: MAKE FROM D2500-1-100 EXTRUSION
- INSTALL D3389-1 WEB TO OUTER TUBE USING SIKAFLEX-241/-291 PER QSI 015

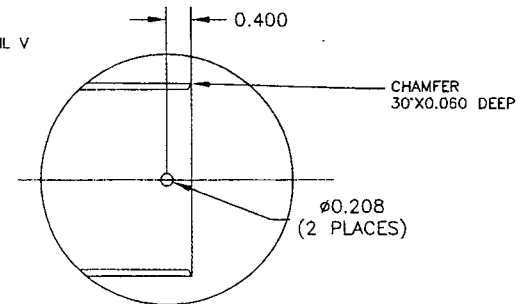
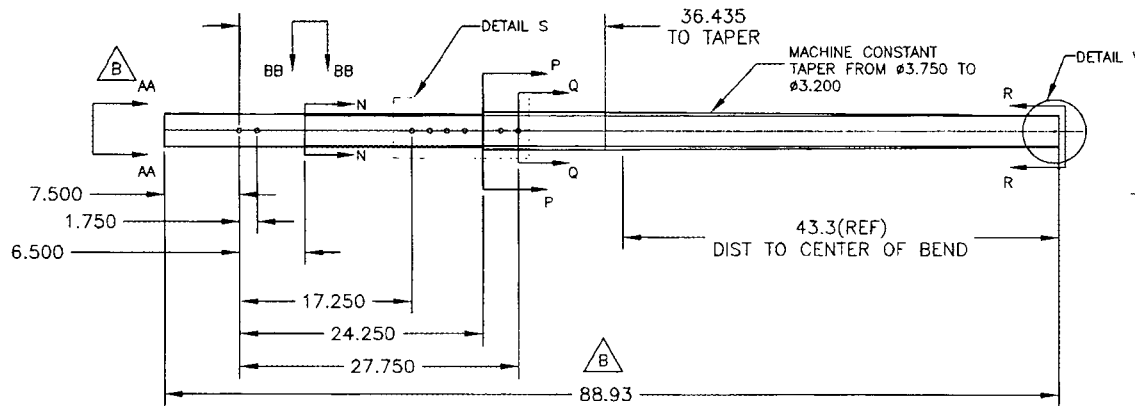
COPYRIGHT © 2008 BY DART AEROSPACE USA, INC.

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.

DESIGN PH	DRAWN BY PH	DART DART AEROSPACE USA, INC. PORT HADLOCK, MA
CHECKED H	APPROVED H	
DATE 07.01.18	DRAWING NO. D3391	REV. F SHEET 3 OF 5 SCALE 1:20
TITLE 412 FLOAT SKIDTUBE		

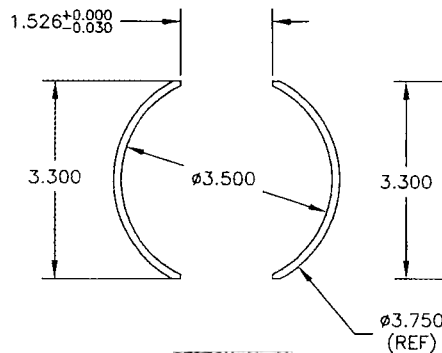


VIEW BB-BB
(SCALE 1:3)

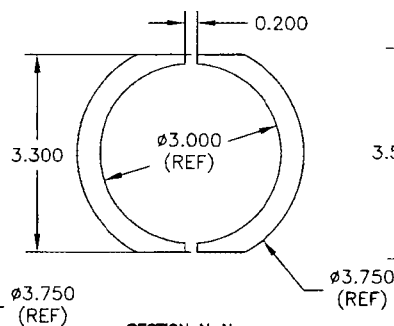


DETAIL V
(SCALE 1:2)

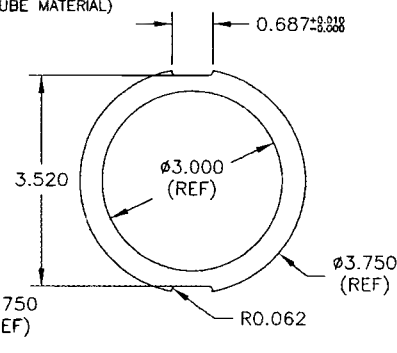
D3391-3 AFT DRILLING AND CUTTING DETAIL
(MAKE FROM D6014-090 SKIDTUBE MATERIAL)



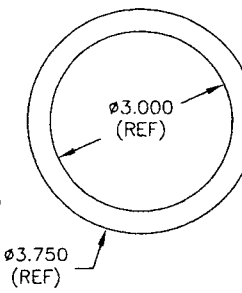
SECTION AA-AA
(SCALE 1:2)



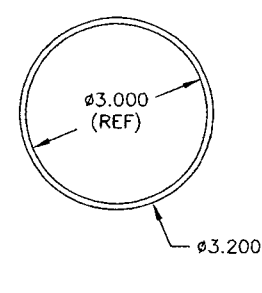
SECTION N-N
(SCALE 1:2)



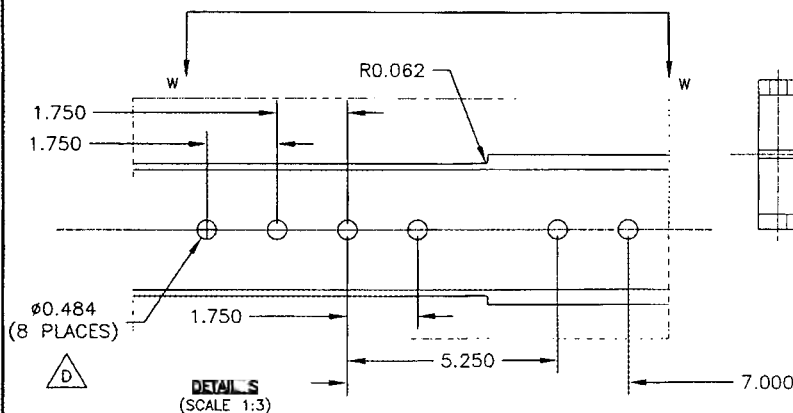
SECTION P-P
(SCALE 1:2)



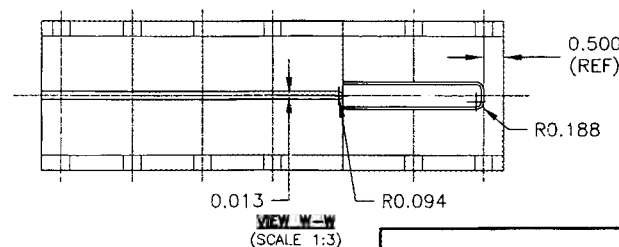
SECTION Q-Q
(SCALE 1:2)



SECTION R-R
(SCALE 1:2)



DETAIL S
(SCALE 1:3)

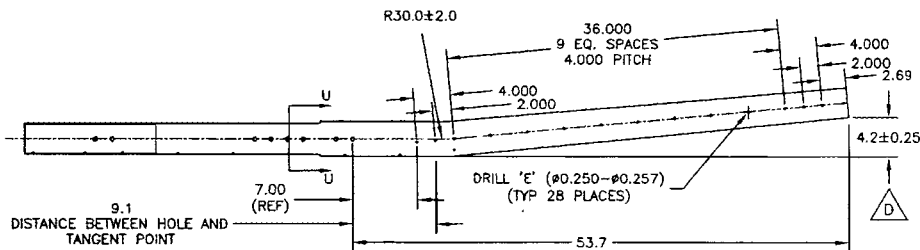


VIEW W-W
(SCALE 1:3)

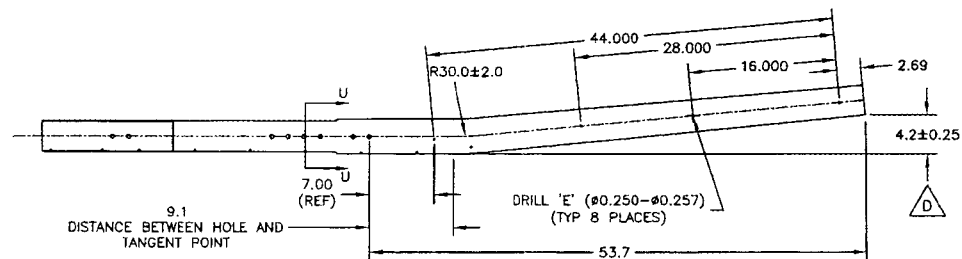
RELEASED
07-05-13 PH
PFC ELN #934

COPYRIGHT © 2005 BY DART AEROSPACE USA, INC.
THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.

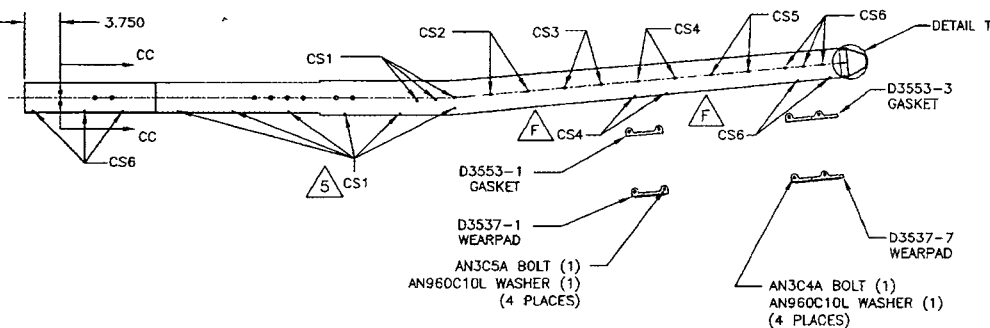
DESIGN PH	DRAWN BY PH	DART DART AEROSPACE USA, INC. PORT HADLOCK, WA	REV. F
CHECKED H	APPROVED H	DRAWING NO. D3391	SHEET 4 OF 5
DATE 07.01.18	TITLE 412 FLOAT SKIDTUBE	SCALE 1:12	



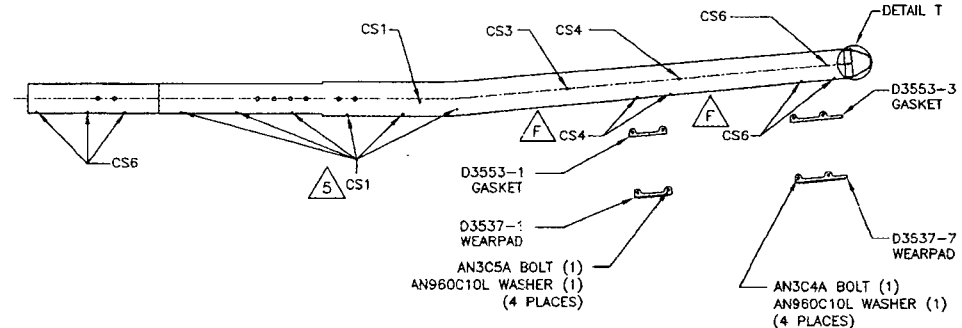
D3391-015 BENDING AND ASSEMBLY DETAIL



D3391-025 BENDING AND ASSEMBLY DETAIL



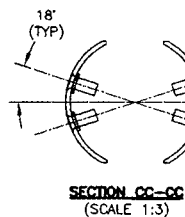
D3391-015 INSERT AND WEARPAD INSTALLATION DETAIL
(SEE TABLE)



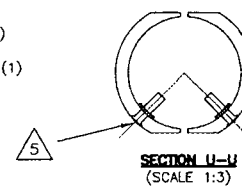
D3391-025 INSERT AND WEARPAD INSTALLATION DETAIL
(SEE TABLE)

D3391-015/-025 AFT TUBE ASSEMBLY PARTS LIST

QTY - 015	QTY - 025	PART NUMBER	DESCRIPTION
X	X	D3391-015	AFT TUBE ASSEMBLY
		D3391-025	AFT TUBE ASSEMBLY
1	1	D5014-090	AFT TUBE
1	1	D2646	AFT CAP
1	1	D3537-1	WEARPAD
1	1	D3537-7	WEARPAD
1	1	D3553-1	GASKET
1	1	D3553-3	GASKET
18	14	NAS1330S3KB366	INSERT (OR AES10KB366)
4	2	NAS1330S3KB316	INSERT (OR NAS1330C3KB316)
8	6	NAS1330S3KB266	INSERT (OR NAS1330C3KB266)
4		NAS1330S3KB216	INSERT (OR NAS1330C3KB216)
16	12	NAS1330S3KB166	INSERT (OR NAS1330C3KB166)
4		NAS1330S4KB151	INSERT (OR NAS1330C4KB151)
6	6	AN3C4A	BOLT
4	4	AN3C5A	BOLT
2	2	NAS1515H3L	WASHER
10	10	AN960C10L	WASHER



DRILL 'Q' (Ø0.332-Ø0.338)
C'SINK (Ø0.529X100")
NAS1330S4KB151 INSERT (1)
(4 PLACES)



AN3C4A BOLT (1)
NAS1515H3L WASHER (1)
AN960C10L WASHER (1)
(2 PLACES)
DETAIL T (SCALE 1:3)
SEAL WITH SIKAFLEX-241/-291

C'SINK AND INSTALL NAS1330S3KBXXX IN HOLES MARKED CS1-CS6 AS FOLLOWS

HOLES MARKED	QTY D3391-015	QTY D3391-025	C'SINK	P/N
CS1	18	14	Ø0.425	NAS1330S3KB366
CS2	4		Ø0.391	NAS1330S3KB366
CS3	4	2	Ø0.391	NAS1330S3KB316
CS4	8	6	Ø0.391	NAS1330S3KB266
CS5	4		Ø0.391	NAS1330S3KB216
CS6	16	12	Ø0.391	NAS1330S3KB166

COPYRIGHT © 2006 BY DART AEROSPACE USA, INC.
THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.

DESIGN RH	DRAWN BY RH	DART DART AEROSPACE USA, INC. PORT HADLOCK, WA	
CHECKED H	APPROVED H	DRAWING NO. D3391	REV. F SHEET 5 OF 5
DATE 07.01.18	TITLE 412 FLOAT SKIDTUBE		SCALE 1:12

RELEASED
07.03.13 RH
per ELM #934

Peter Hum

From: David Shepherd [dshepherd@dartaero.com]
Sent: April 12, 2007 6:55 PM
To: 'Peter Hum'
Cc: 'Jason Murdoch'; 'L Lacelle'
Subject: RE: d3391-1 fwd tube 0.100 too deep

I think this is an acceptable deviation as long as we are no longer oversizing the holes in the mid-tube. We should be able to machine down the part to address item 2) and bring the part back within tolerance, correct?

David

From: Peter Hum [mailto:phum@dartaero.com]
Sent: Thursday, April 12, 2007 9:38 AM
To: 'David Shepherd'
Cc: Serge Shahbazian
Subject: d3391-1 fwd tube 0.100 too deep

David,

1) In machining a D3391-1 fwd tube, the section of tube that interacts with the D2500-1 extrusion (mid tube) is too long by 0.100". This was caused by operator error.

2) Additionally, the distance between the flats is out of tolerance 3.630 (instead of 3.590 +0.025/-0.010) which results in more material. However, this will cause an interference when mated to the D3391-3 mid tube.

Therefore for 1), there is material missing in the location underneath the forward saddle.

I've attached pictures explaining the situation.

Is this part scrap?

Peter

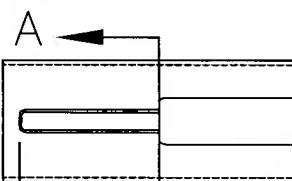
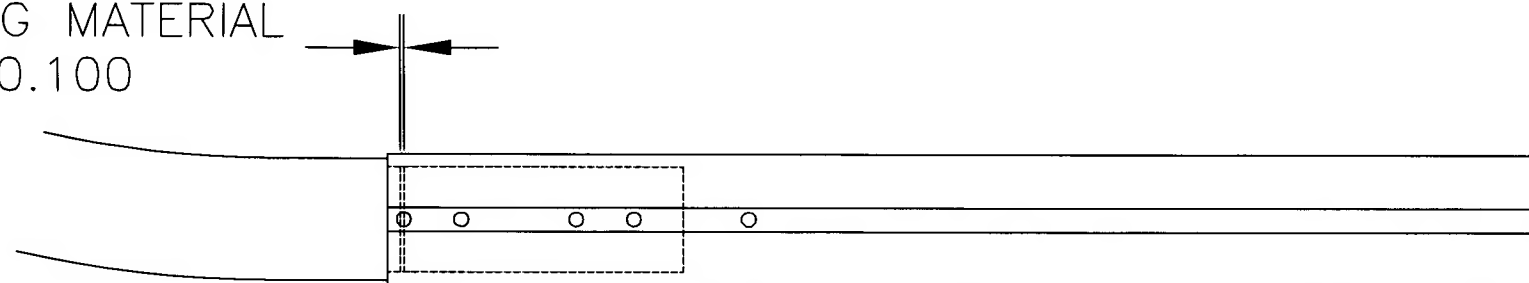
P.S. Call me if you want to discuss

--
No virus found in this incoming message.
Checked by AVG Free Edition.
Version: 7.5.446 / Virus Database: 269.2.0/756 - Release Date: 4/10/2007 10:44 PM

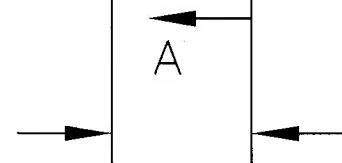
--
No virus found in this outgoing message.
Checked by AVG Free Edition.
Version: 7.5.446 / Virus Database: 269.3.0/758 - Release Date: 4/12/2007 11:52 AM

26/04/2007

MISSING MATERIAL
0.100



NOMINAL 4.250
(ACTUAL MEASURED 4.350)



NOMINAL $3.590^{+0.025}_{-0.010}$
(ACTUAL MEASURED 3.630)

SECTION A-A





